



Memorandum

Date: June 7, 2005
To: Tony Mazzella, CTIP Project Manager, SDOT
From: Tom Noguchi, Mirai Transportation Planning and Engineering
Subject: Evaluation Criteria Comparisons

This memo summarizes the similarities and differences between the evaluation criteria that have been developed for the CTIP and those developed for the City's Capital Improvement Program (CIP). The memo also reports the results of evaluating a sample list of CTIP projects against both sets of criteria.

Proposed CTIP Evaluation Criteria

The CTIP has developed the following set of evaluation criteria to screen and prioritize the potential improvement projects in the CTIP study area. These criteria have been recommended by the CTIP consultant and were reviewed by the Northgate Stakeholder Transportation Subcommittee. They are scored in the range of -5 to +5.

1. **Safety**
2. **Neighborhood livability**
3. **Pedestrian mobility**
4. **Bicycling mobility**
5. **Transit rider mobility**
6. **Auto driver mobility**
7. **Cost-effectiveness and implementation feasibility**
8. **Housing and economic development**
9. **Infrastructure preservation/maintenance**
10. **Environmental sustainability**

The CTIP consultant also recommended that the evaluation criteria be weighted based on the relative importance among them. The recommended relative weights among the evaluation criteria, totaling 100 points, are shown below:



Evaluation Criteria	Weight	Maximum Points
Safety	4	20
Neighborhood Livability	3	15
Pedestrian Mobility	2	10
Bicycling Mobility	2	10
Transit Rider Mobility	2	10
Auto Driver Mobility	2	10
Cost-effectiveness and Implementation Feasibility	2	10
Housing and Economic Development	1	5
Infrastructure Preservation/Maintenance	1	5
Environmental Sustainability	1	5
Total Maximum Point		100

Proposed CIP Project Prioritization Criteria

In February 2005, the SDOT developed draft evaluation criteria that would be applied to potential CIP projects. Those proposed evaluation criteria, which are listed below, include seven categories that total 100 points.

1. **Safety** – 20 points
2. **Mobility improvements** – 15 points
3. **Preserving/maintaining infrastructure** – 15 points
4. **Cost effectiveness** – 15 points
5. **Comprehensive Plan/ Urban Village land use strategy** – 15 points
6. **Improving the environment** – 10 points
7. **Economic development** – 10 points

Major Differences

The CIP criteria include the Comprehensive Plan/Urban Village land use strategy criterion, not included as part of the CTIP evaluation criteria. For the CTIP, this is not an issue since by definition the CTIP is intended to implement the Comprehensive Plan/ Urban Center land use vision within the Northgate area. Therefore, the CTIP assumes that all potential improvements identified through the CTIP process would support this CIP criterion.

Conversely, the CTIP includes the Neighborhood Livability criterion where the CIP does not. This criterion reflects the concerns and desires expressed by the Northgate



Stakeholder Group. This criterion will be evaluated based on the following performance objectives:

- Reduce excessive through-traffic volumes on residential streets.
- Minimize increased traffic volumes on adjacent streets as a result of any action that is proposed.
- Keep vehicle speeds at 25 mph or less on residential streets.
- Reduce risks of pedestrian and bicycle collisions with vehicles on arterials and residential streets.

An additional difference between the sets of criteria is that the CTIP separates the mobility category among the transportation modes: auto, pedestrian, bicycle and transit, whereas the CIP system allocates 15 points for mobility overall. CTIP is intended to benefit individual modes; therefore, improvement projects are initially evaluated with a single mode focus. Under CIP, the highest score is given to a project that reduces congestion, improves the flow of traffic and provides access and mobility benefits to *multiple modes*, including transit, pedestrians, bicyclists and freight.

After the CTIP projects are evaluated and screened, adjacent projects may be “packaged” so that the project package would provide benefits to the multiple modes.

Generally, the CTIP criteria would provide a higher score to a project that provided a high degree of benefit to multiple modes.

Example Evaluation with CTIP and CIP Criteria

The CTIP consultant selected following four potential improvement projects and rated them with the CTIP evaluation criteria and the CIP project selection criteria:

- Add left turn pockets on all approaches at the NE 130th Street/ Meridian Avenue NE intersection
- Provide walkways on both sides of 115th Street between 5th Avenue NE and Lake City Way
- Add an additional westbound-to-southbound left turn lane at the Northgate Way and 5th Avenue NE intersection
- Stripe bicycle lanes on the existing curb lanes on both sides of College Way between N 105th Street and N 92nd Street

Tony Mazzella and Tom Noguchi rated these four potential projects using the CTIP and CIP criteria definitions. The results are shown in **Table 1**.



Conclusion

1. It appears that the total scores derived using the CTIP criteria and their weights are similar to those using the CIP criteria.
2. It is possible that major roadway projects that aimed at reducing traffic congestion in the CTIP study area might gain slightly more points through the CIP process than with the CTIP criteria, assuming they support the Comprehensive Plan/Urban Village vision.
3. Pedestrian/bicycle facility improvements located in the residential neighborhoods within the CTIP study may be more competitive using the CTIP criteria. These type projects are intrinsic to the Northgate/CTIP vision.



Table 1. Example Results Scored with CTIP and CIP Criteria

	Add left turn pockets on all approaches at the NE 130 th Street/ Meridian Avenue NE intersection		Provide walkways on both sides of 115 th Street between 5 th Avenue NE and Lake City Way		Add an additional westbound-to-southbound left turn lane at the Northgate Way and 5 th Avenue NE		Stripe bicycle lanes on the existing curb lanes on both sides of College Way between N 105 th Street and N 92 nd Street	
	CTIP	CIP	CTIP	CIP	CTIP	CIP	CTIP	CIP
Safety	20	20	20	20	0	0	20	20
Neighborhood livability	0		9		0		0	
Pedestrian mobility	4	5	8	3	0	7	4	7
Bicycling mobility	0		0		0		10	
Transit rider mobility	0		0		2		-4	
Auto driver mobility	2		0		8		0	
Cost-effectiveness and implementation feasibility	4	7	4	7	-2	0	10	15
Comprehensive Plan/ Urban Village land use strategy		0		9		7		0
Housing and economic development	0	0	0	0	2	4	0	0
Infrastructure preservation/ maintenance	0	0	0	0	0	0	0	0
Environmental sustainability	0	0	-1	0	0	0	2	2



Total	30	32	40	39	10	18	42	44
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